



National Transportation Safety Board

Human Performance



Preview

- The pilot's errors
- The role of the OCC
- The influence of distraction
- The influence of fatigue

The Pilot's Lapses / Errors of Omission

Opportunities to detect the low fuel condition

- During preflight inspection
- During before-takeoff checklist
- When making the departure fuel report

The Pilot's Decision-making

- During discussion with AirCom, the pilot:
 - Confessed a low fuel situation
 - Asked for help identifying refueling locations
 - Evaluated several alternatives
- No close options were found

The Pilot's Decision-making

- Proceeded to Midwest National
- Midwest National was 32 minutes away
- The helicopter had 30 minutes of fuel
- 20-minute fuel reserve was required

The Pilot's Decision-making

- Only appropriate course of action was to abort mission and wait for fuel to be delivered
- Would have resulted in delays and possibly other negative outcomes

Role of the OCC

- Staffed by a qualified pilot
- Available 24 hours a day
- Would have queried pilot more extensively, recommended aborting the mission
- Contacting the OCC was not required

Pilot Distraction (Non-Operational Use of PED)

- During period when helicopter was being returned to service
- During both flights
- Between flights
- Pilot's last text was sent 19 minutes before accident

Pilot Distraction (Non-Operational Use of PED)

- Unnecessary, self-induced distraction
- Occurred when safety-critical activities were being performed in air and on ground
- Increased likelihood of attentional lapses, errors of omission, decision errors

Pilot Fatigue

- Slept 5 or fewer hours the previous night
- Pilot said he did not sleep well and felt tired
- Prepared the helicopter in the afternoon
- Cumulative duty time over 12 hours, time since waking over 13 hours by the time of the accident

Pilot Fatigue

Fatigue increases

- Attentional lapses
- Perseveration on ineffective solutions
- Reaction time

Pilot Fatigue

Fatigue increases

- Attentional lapses
- Perseveration on ineffective solutions
- Reaction times

Fatigue

- Company provided fatigue training, but pilot's sleep was restricted due to personal activities
- Company provided quiet, comfortable sleeping quarters at pilot's base, but he did not use them

Summary

- Pilot's errors
- Role of the OCC
- Distraction
- Fatigue



National Transportation Safety Board